

DISCUSSION OF THE AMENDMENT

Claims 1 and 3 have been amended by deleting hydrocarbons and fatty acids from the hydrophobic compound Markush group. Claim 1 has been further amended by deleting the last-recited limitation (“and wherein . . .”) Claims 10 and 17 have been canceled. Claim 16 has been amended by inserting the previously inadvertently omitted word --from--.

No new matter is believed to have been added by the above amendment. Claims 1, 3-9, 12-16 and 18-19 are now pending in the application. Of these claims, Claims 12-15 stand withdrawn from consideration.

REMARKS

The rejection of Claim 10 under 35 U.S.C. § 102(b) as anticipated by JP 2000-230084A (Nakahara et al), is respectfully traversed. Indeed, the rejection is now moot in view of the above-discussed amendment. Accordingly, it is respectfully requested that this rejection be withdrawn.

The rejections of Claims 1, 3-4, 7-10 and 18-19 under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over, DE 19857204, as evidenced by US 6,340,662 (Millhoff et al); and of Claim 5 under 35 U.S.C. § 103(a) as unpatentable over Millhoff et al, are respectfully traversed.

The Examiner relies on Millhoff et al's disclosure of a paraffin wax as meeting the terms of the hydrocarbon member of the hydrophobic compound Markush group. However, hydrocarbons have been deleted from this Markush group in the above-discussed amended claims. Accordingly, it is respectfully requested that these rejections be withdrawn.

The rejection of Claims 16 and 17 under 35 U.S.C. § 103(a) as unpatentable over Millhoff et al in view of US 5,700,351 (Schuhmacher et al) or US 5,236,499 (Wegner et al), is respectfully traversed. The disclosures and deficiencies of Millhoff et al have been discussed above. Neither Schuhmacher et al nor Wegner et al remedy these deficiencies. Schuhmacher et al and Wegner et al have been relied on for a disclosure of polyglyceryl ester mixtures. However, even if such mixtures were used in Millhoff et al, the result would still not be the presently-claimed invention. Accordingly, it is respectfully requested that these rejections be withdrawn.

The rejection of Claims 1, 3-10 and 16-19 under 35 U.S.C. § 103(a) as unpatentable over US 4,626,377 (Kavchok et al) taken with Schuhmacher et al or Wegner et al, is respectfully traversed.

Kavchok et al discloses a defoaming composition comprising as the primary component an aqueous hydrophobic dispersion of an alcohol of 14-28 carbon atoms, a fatty acid of 14-18 carbon atoms, a soap of a fatty acid of 14-28 carbon atoms, and a nonionic or anionic surfactant, and as a secondary component a dispersion of a hydrophobic solid in a water insoluble liquid (Abstract). Among the hydrophobic solids listed as applicable in the secondary component are various bisamides obtained by the reaction of a polyamide with a solid fatty acid or mixture thereof (column 4, line 50ff). As indicated by the Examiner, Example 4 contains such a secondary component.

Fatty acids have been deleted from the hydrophobic compound Markush group in the above-discussed amended claims. It would not have been obvious to omit the required fatty acid component from Kavchok et al's defoaming composition, since to do so would render Kavchok et al's invention unsatisfactory for its intended purpose. See *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984). See also MPEP 2143.01.

Schuhmacher et al and Wegner et al have been discussed above. Thus, even if polyglyceryl esters disclosed therein were incorporated into the composition of Kavchok et al (which the Examiner acknowledges does not disclose polyglyceryl esters), the result would still not be the presently-claimed invention.

While the above should be sufficient to overcome the rejection, Applicants believe it would be useful to repeat Applicants' discovery herein and the comparative data supporting it. Thus, Applicants have discovered that when components (i) and (ii) of the present claims are used together, defoaming is obtained that is better than the use of either component (i) or (ii) alone, based on the same total amount of antifoam. Described in the specification beginning at page 14, Examples 1-3 are according to the presently-claimed invention. Comparative Examples 1-4 are for purposes of comparison, each of which contains only one of the two components (i) and (ii). As described in the specification at page 19, lines 36-40,

the examples and comparative examples were tested for their antifoam or deaerating effect when used in amounts of 5 or 3 ppm, based on dry paper stock. The results are shown in the table at page 20 of the specification, reproduced below:

Example	Comparative example	Air content in % by volume with use of			
		5 ppm, based on dry matter, of deaerator		3 ppm, based on dry matter, of deaerator	
		lowest value	average over 5 min	lowest value	average over 5 min
1	-	0.40	0.68	0.83	1.02
-	1	0.85	1.1	1.01	1.22
2	-	0.38	0.75	0.98	1.20
-	2	0.82	1.03	1.03	1.18
3	-	0.42	0.72	0.80	1.05
-	3	0.88	1.12	0.98	1.21
-	4	1.01	1.23	1.10	1.22

As Applicants describe in the specification at page 20, lines 17-19, “the combination of polyglyceryl esters with ethylenebisstearamide has an improved effect compared with the use of the individual components.”

For all the above reasons, it is respectfully requested that this rejection be withdrawn.

The provisional rejection of Claims 1, 3-5, 7-10 and 16-19 on the ground of nonstatutory obviousness-type double patenting over at least Claims 1, 5 and 8 of copending Application No. 10/570,154 (copending application), WO-A-94/20680 (WO ‘680) and US 6,251,958 (Pichai et al), is respectfully traversed.<sup>1</sup>

There is nothing in the claims of the copending application directed specifically to a bisamide of ethylene diamine and carboxylic acids, let alone in combination with at least one

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<sup>1</sup> That the new prior art, i.e., WO ‘680 and Pichai et al, are not listed in the statement of the rejection is irrelevant; reliance thereon is all that is necessary. “Where a reference is relied on to support a rejection, whether or not in a ‘minor capacity,’ there would appear to be no excuse for not positively including the reference in the statement of rejection.” *In re Hoch*, 166 USPQ 406, 407 n.3 (CCPA 1970). See also MPEP 706.02(j).

polyglyceryl ester of the type recited in the present claims, and in the amounts recited in the present claims. Neither WO '680 nor Pichai et al, which are relied on for disclosure of bisamides of ethylenediamine and carboxylic acids, remedy the above-discussed deficiencies. Nor do the claims of the copending application combined with WO '680 or Pichai et al suggest the superior results obtained with the combination of components (i) and (ii). Accordingly, it is respectfully requested that the provisional rejection be withdrawn.

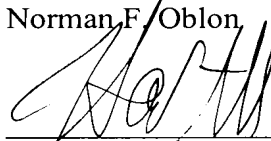
The rejection of Claims 16 and 17 under 35 U.S.C. § 112, second paragraph, is respectfully traversed. Indeed, the rejection is now moot in view of the above-discussed amendment. Accordingly, it is respectfully requested that this rejection be withdrawn.

The rejection of Claims 1, 3-10 and 16-19 under 35 U.S.C. § 112, first paragraph, as failing to comply with the description requirement, is respectfully traversed. Indeed, the rejection is now moot in view of the above-discussed amendment. Accordingly, it is respectfully requested that this rejection be withdrawn.

All of the presently-pending claims in this application are now believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

Respectfully submitted,

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